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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/493,630	01/28/2000	Eric T. Stubbs	303.662US1	2483
21186	7590	12/01/2003	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			KIM, KEVIN	
		ART UNIT		PAPER NUMBER
		2634		

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/493,630	STUBBS, ERIC T.
	Examiner	Art Unit
	Kevin Y Kim	2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 14 October 2003.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-53 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 1-23 and 27-50 is/are allowed.

6) Claim(s) 24 and 51-53 is/are rejected.

7) Claim(s) 24 and 25 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) All    b) Some \*    c) None of:

        1. Certified copies of the priority documents have been received.

        2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

        3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    \* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_

4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. The indicated allowability of claim 24 is withdrawn in view of the newly discovered reference(s) to US patent No. 4,262,264. Rejections based on the newly cited reference(s) follow. Claims 51-53 are rejected for the same ground since they have not amended or argued for. The remaining claims as amended are allowed.

### *Claim Rejections - 35 USC § 102*

2. Claim 24 is rejected under 35 U.S.C. 102(b) as being anticipated by Vandegraaf (US 4,262,264).

Referring to Fig.2, Vandegraaf discloses a phase detector comprising;  
a first input mode (18), a second input node (17), a first output node (A), a second output node (D);  
a first phase comparator (20) coupled to the first input node (18), the second input node (17) and the first output node (A);  
a first delay line (24) coupled to the first input node (18);  
a second phase comparator (25) coupled to the delay line (24), the second input node (17) and the second output node (D).

3. Claims 51-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Jefferson et al (US 5,744,991, previously cited).

Consider claim 51. Referring to Fig. 1A, Jefferson et al discloses a processing system (101A) comprising a processor (inherent) and a memory (105A). See col.1, lines 44-48. Fig. 4

shows a memory having a delayed loop including a delay line (212,216) comprising: "a coarse adjustment portion" comprising "a first plurality of delay cells" (212) and "a first shift register" (210), and "a fine adjustment portion" comprising "a second plurality of delay cells" (216) and "a second shift register" (220). See col.8, lines 54-60. It can be inferred that the delay amount of each cell in the variable macro delay (216) is greater than that in the variable micro delay.

Regarding claim 52, the first shift register (210) is responsive to a phase detector (202).

Regarding claim 53, the second shift register (220) is responsive to a phase detector (218).

*Allowable Subject Matter*

4. Claims 1-23,27-50 are allowed.
5. Claims 25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y Kim whose telephone number is 703-305-4082. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

kvk



STEPHEN CHIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600